

5/15

w/o SPLIT






DART AEROSPACE LTD	Work Order:	22835 B
Description: Ø3.250 Support	Part Number:	D2940-1
Dwg: D2940 Rev. A1	Qty:	16 10
		Page 1 of 1

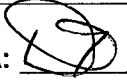
Step	Location	Procedure	By	Date	Qty
1	DC	Issue Traveller. Blank size makes (2) D2940-1 Dwg not required	RF	05.03.23	10
2	PG	Issue P/O: 7007787 Description: D6104-007 Material: 17-4 PH SS (AMS 5643 OR AISI 630) as per Dwg D6104 Material release note required.	11	05-03-24	10
3	RG	Receive and Inspect for raw material dimensions. Ensure material release note is attached.	CH	05/04/01	10
4	MS	Turn blank for Haas as per Folio FA079	SG	05.05.12	10
5	QC1	Inspect all dimensions as per Dwg D2940	SG	05.05.12	10
6	MV	Machine as per Folio FA079	34/E	05.05.12	10
7	MV	Tumble & Deburr	34/E	05.05.13	10
8	QC1	Inspect all dimensions to inspection sheet as per Dwg D2940	34/E	05.05.13	10
9	QC8	Inspect dimensions for second check	34/E	05.06.01	10
10	FP	Powder Coat White (4.3.5.2) per QSI 005 4.3	ML	05 06 02	10
11	QC3	Inspect Powder Coat	ml	05-06-03	16
12	ST	Identify and stock	ml	05-06-03	16
13	AC	Cost / part 143.75	SG	05.06-07	16
14	DC	Close W/O 143.75 Inspect Level 21	RF	05.06.08	16

Rev	Date	Change	Revised By	Approved
A	01.01.08	Preliminary Issue	EC	
B	01.08.15	Removed Heat treating	EC	
C	02.11.26	Reformat; Added P/O	KJ / RF RF	95

RELEASED
02/11/29 RF

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			
05.05.13	3	Chamber on edge too deep. see attached details and authorisation. 2 parts affected		OK per DS, see attached	 05.05.12	 15.06.08	 15.06.08	 05.06.08

Part No: D2940-1 PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA:  Date: 05/06/08

NOTE: Date & initial all entries

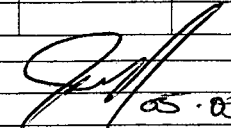
QA: N/C Closed: _____ Date: _____

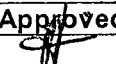
DART AEROSPACE LTD		Work Order:	22835
Description: Ø3.250 Support		Part Number:	D2940-1
Inspection Dwg: D2940 Rev. A1			Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2940 Rev. A1/ DSK081 Rev. B & record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
Lathe Section									
A	3.211	3.216	3.215		3.216	3.216	3.216		
B	4.946	4.966	4.959		4.958	4.958	4.959		
C	0.718	0.738	0.727		0.724	0.728	0.727		
D	0.090	0.110	0.103		0.104	0.109	0.108		
E	3.564	3.584	3.571		3.574	3.567	3.565		
F	0.022	0.042	0.032		0.032	0.032	0.032	36	05/05/22
G	3.444	3.464	3.451		3.452	3.447	3.444		
H	0.112	0.132	0.119		0.112	0.115	0.114		
I	2.170	2.190	2.180		2.183	2.183	2.184		
J	4.451	4.471	4.459		4.455	4.459	4.458		
K	0.413	0.433	0.425		0.424	0.425	0.424		
L	0.913	0.933	0.930		0.927	0.930	0.928		
M									
N									
HAAS Section									
AA	0.240	0.260		0.250	0.250	0.250	0.256		
AB	0.490	0.510		0.50	0.50	0.50	0.50		
AC	0.140	0.160	0	0.150	0.150	0.152	0.152		
AD	3.510	3.530		3.529	3.529	3.528	3.529		
AE	1.633	1.673		1.670	1.671	1.671	1.671		
AF	1.493	1.513		1.510	1.511	1.507	1.506		
AG	0.040	0.060		0.047	0.048	0.046	0.047		
AH	0.188	0.193	DT8706	0.188	✓	✓	✓		
AI	0.140	0.160		0.149	0.150	0.149	0.149		
AJ	2.518	2.538	1	2.521	2.520	2.528	2.528		
AK	0.040	0.060		0.048	0.048	0.045	0.048		
AL	0.010	0.020		0.010	0.015	0.010	0.010		
AM	0.140	0.160		0.154	0.145	0.150	0.149		
AN	0.350	0.450		0.360	0.360	0.360	0.360		
AO	0.240	0.260		0.250	0.250	0.250	0.256		
AP	0.150	0.170		0.168	0.168	0.158	0.164		
AQ	0.053	0.073		0.063	0.063	0.063	0.063		
AR	101.64	105.64	DT8698	✓	✓	can't do too to measure			
AS	0.257	0.262	DT8683	✓	✓	✓	✓		
AT	0.053	0.073		0.063	0.063	0.063	0.063		
AU	4.118	4.138		4.126	4.126	4.126	4.126		
AV									
AW									
Accept/Reject									

Measured by:	3. G
Date:	05/05/11

Audited by:	
Date:	05.05.11

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	

DART AEROSPACE LTD		Work Order: 22835
Description: Ø3.250 Support		Part Number: D2940-1
Inspection Dwg: D2940 Rev. A1		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2940 Rev. A1/ DSK081 Rev. B & record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	15	16	17	18	By	Date
Lathe Section									
A	3.211	3.216		3.216	3.216	3.215	3.215	3.6	05/05/20
B	4.946	4.966		4.958	4.959	4.961	4.959		
C	0.718	0.738		0.729	0.730	0.728	0.727		
D	0.090	0.110		0.110	0.108	0.110	0.110		
E	3.564	3.584		3.567	3.569	3.569	3.568		
F	0.022	0.042		0.032	0.032	0.032	0.032		
G	3.444	3.464		3.447	3.447	3.447	3.447		
H	0.112	0.132		0.116	0.117	0.116	0.117		
I	2.170	2.190		2.183	2.183	2.182	2.183		
J	4.451	4.471		4.458	4.457	4.457	4.458		
K	0.413	0.433		0.429	0.430	0.429	0.428		
L	0.913	0.933		0.920	0.923	0.928	0.930		
M									
N									
HAAS Section									
AA	0.240	0.260		0.250	0.250	0.250	0.250		
AB	0.490	0.510		0.50	0.50	0.50	0.50		
AC	0.140	0.160		0.159	.156	.155	.158		
AD	3.510	3.530		3.529	3.530	3.529	3.530		
AE	1.633	1.673		1.671	1.668	1.669	1.666		
AF	1.493	1.513		1.509	1.510	1.510	1.507		
AG	0.040	0.060		0.063	0.063	0.049	0.054		
AH	0.188	0.193	DT8706						
AI	0.140	0.160		0.149	.152	.153	.153		
AJ	2.518	2.538		2.528	2.528	2.528	2.528		
AK	0.040	0.060		0.047	0.052	0.048	0.048		
AL	0.010	0.020		0.010	0.010	0.010	0.010		
AM	0.140	0.160		0.148	.147	.147	.148		
AN	0.350	0.450		0.380	.385	.385	.390		
AO	0.240	0.260		0.253	0.250	0.250	0.250		
AP	0.150	0.170		0.158	.161	.163	.161		
AQ	0.053	0.073		0.063	0.063	0.063	0.063		
AR	101.64	105.64	DT8698	No Tool To Measure					
AS	0.257	0.262	DT8683						
AT	0.053	0.073		0.063	0.063	0.063	0.063		
AU	4.118	4.138		4.130	4.129	4.128	4.129		
AV									
AW									
Accept/Reject									

Measured by:	J.L
Date:	05/06/01

Audited by:	[Signature]
Date:	05.10.01

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	[Signature]

RELEASED
03.07.01 RF

DART AEROSPACE LTD		Work Order: 22833	
Description: Ø3.250 Support		Part Number: D2940-1	
Inspection Dwg: D2940 Rev. A1		Page 1 of 1	

Inspect dimensions highlighted on inspection sheet drawing D2940 Rev. A1/ DSK081 Rev. B & record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	19	210	3	4	By	Date
Lathe Section									
A	3.211	3.216		3.215	3.216				
B	4.946	4.966		4.956	4.963				
C	0.718	0.738		0.728	0.725				
D	0.090	0.110		0.100	0.109				
E	3.564	3.584		3.570	3.569				
F	0.022	0.042		0.032	0.030			5.6	05/05/02
G	3.444	3.464		3.446	3.446				
H	0.112	0.132		0.117	0.116				
I	2.170	2.190		2.183	2.184				
J	4.451	4.471		4.458	4.458				
K	0.413	0.433		0.430	0.429				
L	0.913	0.933		0.929	0.927				
M									
N									
HAAS Section									
AA	0.240	0.260		.250	.250				
AB	0.490	0.510		.500	.500				
AC	0.140	0.160		.150	.153				
AD	3.510	3.530		3.529	3.529				
AE	1.633	1.673		1.665	1.664				
AF	1.493	1.513		1.505	1.504				
AG	0.040	0.060		.045	.049				
AH	0.188	0.193	DT8706						
AI	0.140	0.160		.153	.152				
AJ	2.518	2.538		2.528	2.528				
AK	0.040	0.060		.050	.052				
AL	0.010	0.020		.010	.010				
AM	0.140	0.160		.148	.149				
AN	0.350	0.450		.390	.385				
AO	0.240	0.260		.250	.250				
AP	0.150	0.170		.163	.164				
AQ	0.053	0.073		.063	.063				
AR	101.64	105.64	DT8698	"no tool to measure"	"no tool to measure"				
AS	0.257	0.262	DT8683						
AT	0.053	0.073		.063	.063				
AU	4.118	4.138		4.127	4.127				
AV									
AW									
Accept/Reject									

Measured by:	J.L
Date:	05/06/01

Audited by:	[Signature] 05-06-01
Date:	

Rev	Date	Change	Revised by	Approved
A	02.12.12	New Issue	KJ/RF	[Signature]

RELEASED
03.07.01 RF

Job Costing Report

Dart Aerospace Ltd.
Hawkesbury

Mar 23, 2005
07:09 am

Work Order No : 0022835
Project Name : D2940-1
Project For : WK515
Work Order Type : Main
Main WO Number :
House Part Number : D2940-1
Description : Support
Manufactured : Yes
Amount Req'd : 10
Amount Done : 0
Start Date : 03-23-05
Est Finish Date : 04-15-05
Act Finish Date :
Drawings Req'd : No
Ok for Approval :
Approval Rec'd :

Department Code:
Burden Flags : NNNNNNNN
WO Status : Open
Invoice State : Not Invoiced
Invoice Date :
Invoice Number :
Invoice Amount : 0.00
Order Entry No :
OE Value : 0.00
Est Mark Up : 0.000%
Actual Mark Up : 0.000%
\$0 Posted to Finished Goods

	Estimated	Actual	Var. %	Posted	To Post
Material Cost :	0.00	0.00	0.00	0.00	0.00
Engineering Hours :	0.00	0.00	0.00		
Engineering Cost :	0.00	0.00	0.00	0.00	0.00
Production Hours :	0.00	0.00	0.00		
Production Cost :	0.00	0.00	0.00	0.00	0.00
Packaging Hours :	0.00	0.00	0.00		
Packaging Cost :	0.00	0.00	0.00	0.00	0.00
OverHead Hours :	0.00	0.00	0.00		
OverHead Cost :	0.00	0.00	0.00	0.00	0.00
CNC Hours :	0.00	0.00	0.00		
CNC :	0.00	0.00	0.00	0.00	0.00
Misc. Hours :	0.00	0.00	0.00		
Misc. :	0.00	0.00	0.00	0.00	0.00
Burden :	0.00	0.00	0.00		
Total Cost :	0.00	0.00	0.00		
Mark up :	0.000	0.000			
Selling Cost :	0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done :	0.00	0.00
Profits/(Loss) :	0.00	0.00



GLORIA MATERIAL TECHNOLOGY CORP.

INSPECTION CERTIFICATE

台南縣新營市新中路35號1樓

1FL, NO.35, HSIN CHUNG RD, HSIN YING,
TAINAN, TAIWAN, ROC

TEL: (06) 6520000

FAX: (06) 6520088

Messrs: PROGRESSIVE ALLOY STEEL UNLIMITED L.L.C.

Order No: 2004003262

Grade: 17-4PH

P.O. NO.: 3370

FILE NO: 2004004782-A

Size: 4-1/2"

Date: 11/30/2004

HEAT-Lot No: S2301-40

Weight: 1026.0KG

P'cs: 3

Condition: HF-Solution Annealed-Peeled

Chemical Composition (wt%)

	C	Si	Mn	P	S	Ni	Cr	Mo	Cu	Nb+Ta
Min.					0.015	3.00	15.00		3.00	0.15
Max.	0.07	1.00	1.00	0.040	0.030	5.00	17.50	0.50	5.00	
Result	0.03	0.36	0.64	0.021	0.023	4.48	15.79	0.13	3.25	

Mechanical Properties Spec.

	Hardness (1/2R)	Grain Size	δ -Ferrite	H900-Hardness (Avg)
Spec. Min.				40HRC
Spec. Max.	363HB		5%	47HRC
Result	333HB	7.5	0.64%	45.1HRC

Tensile Test

	Elongation (A)	Tensile Strength (Rm)	Yield Strength (Rp)	Reduction of Area (Z)
Unit	%	KSI	KSI	%
Min.	10	190	170	40
Max.				
Result	20	210	184	53

Non-Metallic Inclusions: (AMS 2303C)

	Severity	Frequency
Max.	0.35	0.4
Result	0	0

Specification:

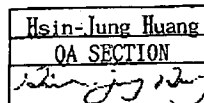
1. ASTM A484M-03a, A564M-04, A370-03a.
2. ASME SA484 (1998), SA564 (1998).
3. AMS 5643Q, 2303C (Magnetic Particle Test).
4. EN 10204/3.1.B.
5. UNS S17400.
6. SAE AMS-H-6875.

Remark:



Our quality and environment management system have been certified by ISO9001 QMS and 14001EMS
We hereby certify that the material described herein has been manufactured and tested with satisfactory result in accordance with the requirement of
the above material specification We hereby Inspection Certificate comply with EN10204 3.1.B.

Date:	3-29-05
Cust:	DART AEROSPACE
W/O #	123023
Qty	235
<input checked="" type="checkbox"/> Size	<input type="checkbox"/> Special Instructions
<input type="checkbox"/> Part #	<input checked="" type="checkbox"/> Alloy <input checked="" type="checkbox"/> Heat/Lot
These test reports are for material shipped on your PO# 674984	
From TMX Copper & Brass Sales	
Quality Representative: [Signature]	
Customer Part #	





GLORIA MATERIAL TECHNOLOGY CORP.

INSPECTION CERTIFICATE

台南縣新營市新中路35號1樓

1FL., NO 35, HSIN CHUNG RD, HSIN YING,
TAINAN, TAIWAN, ROC

TEL: (06) 6520000

FAX: (06) 6520088

Messrs: PROGRESSIVE ALLOY STEEL UNLIMITED L.L.C.

FILE NO: 2004004782-A

Size: 4-1/2"

Date: 11/30/2004

Order No: 2004003262

Grade: 17-4PH

P.O.NO.: 3370

HEAT-Lot No: S2301-40

Weight: 1026.0KG

P'cs: 3

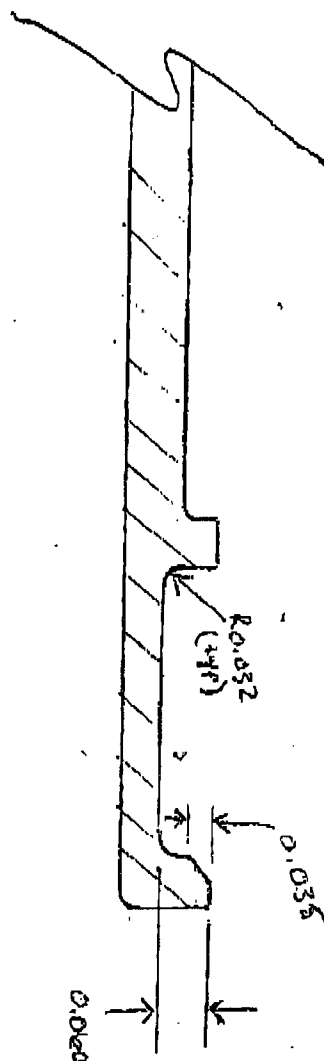
Condition: HF-Solution Annealed-Peeled

1. MANUFACTURING PROCESS: EAF+LHF+VOD, FORGED OR HOT ROLLED.
2. SOLUTION TREATMENT: 1900F FOR 30 MIN/INCH PLUS ONE ADDITIONAL HOUR (MINIMUM ONE HOUR), RAPIDLY COOLED TO BELOW 90F.
3. MATERIAL IS FREE FROM KNOWN CONTACT WITH MERCURY AND RADIUM.
4. MATERIAL IS FREE FROM WELDS OR WELD REPAIRS.
5. ULTRASONIC TEST: OK.
6. MACRO/MICRO OK.
7. MECHANICAL PROPERTIES TESTED AS PER H900 CONDITION.
8. REDUCTION RATION -4:1 MIN
9. FURNACES CALIBRATED TO MIL-H-6875.



Our quality and environment management system have been certified by ISO9001 QMS and 14001EMS.
We hereby certify that the material described herein has been manufactured and tested with satisfactory result in accordance with requirement of the above material specification. We hereby Inspection Certificate comply with EN10204 3.1 B.

Hsin-Jung Huang
QA SECTION
[Signature]



Chamfer blends into R0.032 rad.
No flat between chamfer & radius.

EC 05.05.12

ACCEPTABLE

PERMANENT

05.05.12

ATTACH TO WORK ORDER

